



6712-01

FEDERAL COMMUNICATIONS COMMISSION

[WC Docket No. 16-271; DA 18-197]

Connect America Fund – Alaska Plan

AGENCY: Federal Communications Commission.

ACTION: Notice.

SUMMARY: In this document, the Wireline Competition Bureau and Wireless Telecommunications Bureau, grant in part and deny in part the Alaska Telephone Association's Petition for Reconsideration of the Bureaus' Map Instructions PN and provide clarification regarding Alaska Plan carriers' map data filing obligations (map collection).

DATES: Applicable date announcement: July 1, 2018 filing date.

ADDRESSES: Federal Communications Commission, 445 12th Street, SW., Washington, DC 20554.

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SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Order on Reconsideration in WC Docket No. 16-271; DA 18-197, adopted on February 28, 2018 and released on February 28, 2018. The full text of this document is available for public inspection during regular business hours in the FCC Reference Center, Room CY-A257, 445 12th Street, S.W., Washington, D.C. 20554, or at the following Internet address:

https://transition.fcc.gov/Daily_Releases/Daily_Business/2018/db0228/DA-18-197A1.pdf

I. Introduction

1. In this Order, the Wireline Competition Bureau (WCB) and Wireless Telecommunications Bureau (WTB) (collectively the Bureaus), grant in part and deny in part the Alaska Telephone Association's (ATA) Petition for Reconsideration of the Bureaus' Map Instructions PN and provide clarification regarding Alaska Plan carriers' map data filing obligations (map collection). The

Bureaus grant the Petition in part with respect to the required data accuracy standard for the map collection due to be filed in 2018 and extend the March 1, 2018 submission deadline until July 1, 2018. The Bureaus also provide clarification regarding the data to be filed regarding “community anchor institutions” (CAI or anchor institutions). The Petition is denied in all other respects.

II. Discussion

2. The Bureaus deny ATA’s Petition with respect to its request for the Bureaus to largely forgo the collection of cell-site backhaul and CAI data. Therefore, carriers must submit cell sites and CAIs with their associated links and update that data on a yearly basis as described in the following.

3. As an initial matter, the Bureaus conclude that ATA’s narrow interpretation of the scope of the initial map collection is contrary to the most reasonable reading of the relevant Commission rule, section 54.316(a)(6). ATA does not address the meaning of this rule in its Petition. The first sentence of that rule does not specifically restrict the map collection to “middle-mile” or “backhaul” facilities and states that carriers “shall submit fiber network maps or microwave network maps covering eligible areas.” The language in the rule’s second sentence, by its terms, states that carriers should provide map updates for “middle-mile” facilities. The rule language should be read in the context of the Alaska Plan Order, 81 FR 69696, October 7, 2016 and its discussion of the facilities that may affect carriers’ ability to provide 10/1 Mbps service to end-users. Because the Alaska Plan Order uses multiple terms to describe such facilities, and, as explained in the following, the presence and quality of cell-site backhaul and connections to many CAIs do in fact affect carriers’ ability to meet their current and future commitments over last-mile facilities, the Commission intended the rule requiring the submission of “fiber network maps or microwave network maps” and “middle mile” data to be read broadly to include cell-site backhaul and CAIs.

4. The Bureaus note that the WTB also has the authority to collect this same data upon request regardless of whether those facilities fall within the scope of the map collection in section 54.316(a)(6). Specifically, the WTB may request “additional data” regarding facilities relevant to “determining whether or not [participating mobile carriers] meet their five- and 10-year commitments.”

Carriers' performance commitments are broken down and differentiated by the type of facilities (satellite, fiber, fixed wireless) supporting the committed speed and technology (e.g., LTE) of the last-mile connections serving particular end-user populations. Information regarding the location of cell-site backhaul, CAIs and associated links may be collected by the WTB upon request because they are necessary to determining whether carriers' differentiated commitments are or could be met.

5. Cell-Site Backhaul. Notwithstanding the obligation of carriers to submit cell-site backhaul data pursuant to the plain meaning of section 54.316(a)(6), ATA's position that the map collection is restricted to "middle-mile" facilities as defined in the CAM rests on an incorrect reading of the Alaska Plan Order. The Alaska Plan Order does not, as ATA argues, define "middle-mile" and/or "backhaul" to mean solely the connection between central offices. Rather, these terms are used to describe the entire connection between the last mile and Internet gateway. A cell-site backhaul facility is a subset of this connection.

6. The Commission adopted a more expansive meaning of these terms in the Alaska Plan Order to enable it to identify the "weak-links" in carriers' networks that affect carriers' current and future commitments. As noted in the OBI Technical Paper #1 that ATA cites, cell-site backhaul and connections between central offices "can quickly become the choke point" and "adequate [cell-site] backhaul is one of the key drivers for providing wireless broadband." The Bureaus agree with ATA that high-capacity connections between central offices are relevant to an assessment of whether carriers can meet their commitments to end-users within the exchanges served by those central offices. Such high capacity connections are not, however, sufficient for such an assessment.

7. ATA also does not explain why cell-site backhaul should be considered "last mile" and therefore excluded from the collection. Indeed, as ATA acknowledges, the ordinary meaning of "backhaul," in the wireless context refers to the "connections that link a mobile wireless service provider's cell sites to the mobile switching centers" On the other hand, a "last mile" facility is the connection from the end-user's handset or terminal to the "first point of aggregation," such as a "wireless

tower location.” The Map Instructions do not require the submission of the “last-mile” wireless end-users’ location data.

8. The Alaska Plan Order requirement for carriers to submit data regarding facilities that lie between the “last mile” and the “Internet gateway” is also consistent with the logical structure of the Alaska Plan Order itself. The Alaska Plan Order describes carriers’ networks as a three-part model. Specifically, the Alaska Plan Order separately describes the (1) “last mile”—reflected in the bandwidth and price commitments provided to consumers via wired and wireless facilities and, for wireless commitments, the last-mile wireless technology to be deployed, such as LTE—(2) “middle mile” and/or “backhaul” facilities which connect last mile facilities to the Internet gateway and affect the ability of the carrier to meet its last-mile commitments; and (3) the Internet gateway and the Internet beyond. Under this three-part model, network components other than (1) or (3) and which can affect the ability of the carrier to meet its last mile commitments are (2): “middle mile” and/or “backhaul.” As explained, because cell-site backhaul is not considered “last mile” for purposes of this map filing requirement and is clearly not the “Internet gateway,” it must be “middle mile” and/or “backhaul.”

9. This broad meaning of “middle mile” and “backhaul” is also consistent with the common understanding of these terms in the wireless industry and has been adopted by the Petitioner in other contexts. For example, ATA member GCI, in providing a cost model for wireless facilities in Alaska, used the term “backhaul” to describe both (1) “cell-site backhaul” and (2) the connection to central “hubs” in three Alaskan cities. In that instance, GCI stated that the quality of the last-mile connection is dependent on the robustness of both (1) and (2) and argued that the cost of upgrading both segments is a barrier to providing higher speed last-mile services to Alaskan end-users.

10. The Bureaus grant the Petition in part to the extent it seeks relief from the March 1, 2018 deadline, and the 7.6-meter accuracy requirement. By providing this relief, the Bureaus allow carriers limited flexibility and time to submit data in a way that takes into consideration the particular challenges carriers in Alaska face (e.g., difficult seasonal weather) while also ensuring the Commission is provided

with the data it required for implementing the Plan. The Bureaus also clarify the obligation to report data with respect to CAIs. The Petition is denied in all other respects.

11. Deadline Extension. The Bureaus grant the Petition to the extent that it seeks a deadline extension and extend the filing deadline for the initial map data submission from March 1, 2018, to July 1, 2018. On February 1, 2018, the Office of Management and Budget approved the collection under the Paperwork Reduction Act (PRA) and the rules became effective on February 15, 2018. The Bureaus find that an extension of the deadline under section 54.316 is appropriate in this case because a July 1, 2018 deadline will ensure that carriers will have sufficient time following the recent PRA approval to finalize any data submitted into the High Cost Universal Service Broadband (HUBB) portal and aligns with the Form 481 filing deadline. Additionally, carriers are submitting middle-mile data to the HUBB portal for the first time, and carriers and USAC may need additional time to address any problems or concerns that may arise at the time of filing. This extension will also allow carriers additional time to gather as accurate data as possible in the first filing cycle. Alaska Plan participants will now have nearly ten months of preparation time to gather and submit the data from the release of the initial Map Instructions. This extension does not affect the filing deadline in subsequent years or the March 1, 2018 deadline for the submission of Alaska wireline location data.

12. Accuracy. The Bureaus grant in part and deny in part ATA's request to collect and submit data at a lower level of accuracy than 7.6 meters. Specifically, the Bureaus permit carriers to collect and submit "estimated" data to within 50 meters of accuracy for the filing due by July 1, 2018 where data at 7.6 meters is unavailable. This relief is appropriate given the recent effective date of the data collection in February combined with the challenging weather conditions in Alaska, and the fact that "estimated" data (in the limited cases where 7.6-meter data is unavailable) for the 2018 submission will not inhibit efforts of the Bureaus to implement the Plan.

13. The Bureaus have authority to set an accuracy threshold in the instructions. Indeed, ATA submitted its own, alternative 1000-meter threshold. The Commission delegated to the Bureaus the authority to provide a common format for map submissions, which necessarily includes a mutually

understood accuracy standard. Maps cannot be properly evaluated without a mutually understood and agreed upon accuracy standard. As explained in the following, both the 50-meter and 7.6-meter accuracy standards meet that test.

14. The Bureaus conclude that, on balance, the overall benefit of the data accuracy requirements, as modified here, outweighs any burden on carriers. While the Bureaus need to and will, under these modified instructions, obtain data accurate to 7.6 meters by 2019, the relief the Bureaus provide will greatly reduce carriers' burden to collect that data. A one-year delay in providing data at a 7.6-meter level of accuracy should allow ATA members to collect and submit estimated data using desktop software while largely allowing the collection of more accurate data through site visits as necessary in the normal course of business. Carrier estimated data, combined with 7.6-meter data already in the carriers' possession, are sufficient for the Bureaus to assess carriers' compliance, infrastructure limitations, and progress at the initial stages of the first five-year plan.

15. For the filings due in 2018, carriers may provide an initial "estimate" for nodes and links based on data generated by generally available desktop software. Where a carrier lacks sufficient internal digital data to comply with the 7.6-meter accuracy requirement for all or a portion of its filed network facilities, that carrier may submit estimated data at least as accurate as Google Earth (i.e., accurate to within 50 meters) and denote as estimates the relevant portion(s) of the network submitted. Where the carrier chooses to provide an estimate, it must certify in the HUBB portal, at the time of filing, that it does not possess data meeting the 7.6-meter requirement. Carriers must update any such estimated data no later than their filing due March 1, 2019, with data meeting the 7.6-meter requirement. Similarly, any new data submitted starting in March 1, 2019 (i.e., for network facilities deployed in 2018) and in subsequent filing years must meet the 7.6-meter accuracy requirement. If a carrier currently has internal digital data in its possession for facilities deployed in 2017 or earlier that meet the accuracy requirement, it must file that data by July 1, 2018.

16. The Bureaus reject ATA's contention that information at the 7.6-meter level of accuracy is not necessary for the purposes of the map collection. The Bureaus' review of revised performance

plans in 2020 alongside maps accurate to 7.6 meters provides an important backstop to ensure carriers maximize their commitments and service levels to Alaskans. The 7.6-meter standard is critical for obtaining a complete picture of facilities' locations in relation to other existing data. It is a commonly-used mapping standard for Commission high-cost data, is necessary for the Bureaus to maintain compatibility with census boundary and road data for the census-block based Alaska Plan, and will allow the Bureau to fully identify duplicative facilities.

17. Even in the absence of the relief provided here, the Bureaus reject ATA's argument that the burden of the 7.6-meter standard outweighs the benefit because ATA has not adequately demonstrated the scope of its burden to collect such information. ATA's evidence that the 7.6-meter level of accuracy is too burdensome largely relies on two carrier-employee declarations, stating that not all of their data is stored at the 7.6-meter accuracy level. ATA also notes that the FAA requires collection of some cell tower information at a 6.1 meter accuracy level. Moreover, all of Alaska has wide area augmentation system (WAAS) coverage 100 percent of the time with the exception of the southwestern most Aleutian Islands, which has this coverage at least 95 percent of the time, allowing use by non-expert personnel of inexpensive handheld devices accurate up to three meters.

18. For similar reasons, the Bureaus also reject ATA's counter-proposal that the Bureaus collect data at the 1000-meter accuracy level. ATA's proposed standard is far too inaccurate for the map data collection, as two filers filing the same node could show that node to be more than a mile apart from each other, which could significantly affect Bureaus' understanding of which census blocks have what facilities and what facilities are duplicates. Moreover, as noted, generally available desktop applications provide sufficient accuracy to meet the 50-meter estimate standard described above.

19. Community Anchor Institutions. The Bureaus grant the Petition in part to clarify the collection of CAI data. The Bureaus clarify that carriers need only submit those CAIs and associated links that fall within the statutory definition of a CAI. Furthermore, in the initial collection due July 1, 2018, carriers must submit all CAIs served by fiber or wireless connections. In subsequent years, carriers must submit any additional CAIs and associated links served by fiber or wireless connections that are

being used or will be used to support their service in eligible areas. To the extent that CAI data does not fall under these limiting criteria, it is not reportable. The Bureaus otherwise deny the Petition with respect to ATA's request to limit the submission of CAI data.

20. First, the Bureaus grant the Petition in part to clarify that reportable CAIs are limited to those CAIs that fall within the definition of CAI in 47 U.S.C. 1305(b)(3)(A) that the Commission adopted in the USF/ICC Transformation Order, 76 FR 73830, November 29, 2011. As such, this data collection is limited to the type of CAIs that carriers would report pursuant to 47 CFR 54.313(f)(1)(ii). Because rate-of-return carriers are already reporting the addresses of many of these CAIs on their FCC Form 481, carriers may face a reduced burden when submitting latitude and longitude of these same CAIs and the links connecting these institutions to other nodes in their networks for mapping purposes.

21. Second, consistent with the Alaska Plan Order, the Bureaus make clear that in the initial collection, carriers must submit data regarding any CAIs served by fiber or wireless connections. This limitation is consistent with the plain language of section 54.316(a)(6), which states that Alaska Plan participants "shall submit fiber network maps or microwave network maps covering eligible areas" for the purpose of tracking carriers' access to these facilities that would allow them to provide 10/1 Mbps for all Alaskans. In subsequent years, carriers must submit CAIs served by connections that "are or will be used" to support service in their eligible areas. This would include, at a minimum, those instances where the carrier has actual plans to use the CAI and links to extend the network. CAIs served by connections that "are or will be used" in this manner are in fact "middle mile" and/or "backhaul" within the meaning of the Alaska Plan Order and are therefore subject to collection. CAIs connected to high-capacity links may be used to expand service to underserved and unserved communities. Consequently, information regarding CAIs connected by such facilities is necessary for the Commission to understand whether adequate facilities exist to support additional last-mile connections and for the evaluation of carriers' performance—consistent with the purpose of the map collection.

22. The Bureaus deny ATA's Petition to the extent it seeks to exclude the reporting of CAIs which meet these criteria. ATA argues that all CAIs are "last-mile" facilities and therefore should not be

part of the map collection except in limited circumstances. ATA's position is not consistent with the Alaska Plan Order. ATA argues that the Bureaus' reliance on aggregation points to justify reporting some nodes "proves too much" because a "home's or business's Wi-Fi router is an initial aggregation point." But ATA's argument contravenes its own cited precedent, which separates the network based on points of traffic aggregation with similar network demand. In many instances, CAIs' position in carriers' network architecture is more akin to wireless towers aggregating community-wide traffic than a last-mile home or smartphone user. Indeed, ATA provides a conceptual network map in its Petition equating schools with wireless towers. This model and the ACAM are consistent with the understanding that both a CAI and a wireless tower can and do aggregate community-wide multi-user traffic. In contrast, a home or small business Wi-Fi router typically serves a single end-user location with only a handful of end-users, and it does not aggregate community-wide multi-user traffic.

23. In light of the foregoing discussion, the Bureaus reject ATA's counter-proposal to limit the collection of nodes to cell towers and CAIs that are outside of the exchange but connect to a central office in another exchange. In part because of the vast size of many exchanges in Alaska, knowing whether the central office in an exchange is fiber-fed does not provide a sufficiently granular picture of the potential middle-mile "weak points" or capabilities that could affect the ability of a carrier to meet its commitments or future commitments.

Federal Communications Commission.

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